



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,002	03/01/2002	Ronald Lynn Blair	PU020019	6287

7590 12/13/2006
JOSEPH S. TRIPOLI
THOMSON MULTIMEDIA LICENSING INC.
2 INDEPENDENCE WAY
P.O. BOX 5312
PRINCETON, NJ 08543-5312

EXAMINER

JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
----------	--------------

2621

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,002

Applicant(s)

BLAIR ET AL.

Examiner

Heather R. Jones

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 26, 2006 have been fully considered but they are not persuasive.

The Applicant argues on page 9, lines 1-9 that Suito does not teach, suggest, or disclose "repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation." The Examiner respectfully disagrees. Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted (or partially deleted) within a range corresponding to a normal speed reproduction. Deleting is the same as dropping selected ones of the digital audio samples and the claim does not require the apparatus to be able to repeat and drop selected ones of the digital audio samples. Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

The Applicant argues on page 9, lines 1-9 that there is absolutely no teaching, suggestion, or disclosure in Suito for "transforming the digital audio samples from time domain to corresponding frequency domain audio samples." The Examiner respectfully disagrees. Suito discloses in col. 5, lines 53-60 that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard. MPEG-2 inherently transforms the digital audio samples from time domain to

corresponding frequency domain audio samples in order to process the samples.

Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

The Applicant argues on page 9, lines 1-9 that Suito fails to teach "scaling a playback audio frequency of the frequency domain audio samples in accordance with the trick mode playback". The Examiner respectfully disagrees. Suito discloses in Figs. 3-6 that the samples go through an amplitude suppression process, which means the amplitudes of the samples are scaled accordingly. Suito discloses that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard, which means the samples are transformed from the time domain to the corresponding frequency domain in order to process the samples. Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 8-11, 17, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Suito et al. (U.S. Patent 6,925,340).

Regarding claim 1, Suito et al. discloses a method for audio content playback during video trick mode playback, comprising: reading a coded digital data from a storage medium, the coded digital data comprising a video programming and corresponding audio programming; decoding from a portion of the digital data comprising the audio programming a plurality of digital audio samples corresponding to a selected portion of the video programming; repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video programming; and key shifting a playback audio pitch associated with the audio samples to compensate for the trick mode playback (col. 7, lines 31-46).

Regarding claim 2, Suito discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing the method further comprising generating an audio playback signal corresponding only to a remaining set of the audio samples (abstract).

Regarding claim 8, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the storage medium is selected from a group consisting of a DVD, a magnetic hard disk, magneto optical disk and a video CD (as can be seen from Fig. 1).

Regarding claim 9, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the coded digital data is an MPEG format and the reading step further comprises decoding an MPEG bit stream to obtain said audio samples (col. 5, lines 53-60).

Regarding claims 10, 11, 17, and 18, these are apparatus claims corresponding to the method claims 1, 2, 8, and 9. Therefore, claims 10, 11, 17, and 18 are analyzed and rejected as previously discussed with respect to claims 1, 2, 8, and 9.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-7 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suito et al. as applied to claims 1 and 10 above, and further in view of Shimura (U.S. Patent 6,658,197).

Regarding claims 5, Suito discloses all the limitations as previously discussed with respect to claim 1, but fails to further disclose the method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples.

Referring to the Shimura reference, Shimura discloses a method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video

programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples (Fig. 4; col. 5, lines 33-50; col. 6, lines 29-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the feature of having better quality sound at a lower speed as disclosed by Shimura to the device disclosed by Suito in order to provide a user with a device that provides a quality sound at a higher or lower speed (during trick play).

Regarding claims 6 and 3, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 2 and 5 including that the audio samples are repeated $1/n$ times, where n is equal to the selected trick mode playback speed relative to a normal playback speed as well as the audio samples are dropped at a rate of every n samples, where n is equal to the selected trick mode playback speed relative to a normal playback speed. (See Shimura: Fig. 4; col. 7, lines 29-32 – the inverse proportions are being used accordingly for faster and lower speeds than normal).

Regarding claims 7 and 4, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 2, 3, 5, and 6 including that the key shifting step further comprises shifting the playback audio pitch by a multiplying factor of approximately $1/n$ as well as the key shifting step further comprises shifting said playback audio pitch by a factor of approximately $1/n$

Art Unit: 2621

(Shimura: Fig. 4; col. 7, lines 29-32; Suito: col. 7, line 31 – col. 8, line 8 – the frequency the pitch go hand in hand).

Regarding claims **12-16**, these are apparatus claims corresponding to the method claims 3-7. Therefore, claims 12-16 are analyzed and rejected as previously discussed with respect to claims 3-7.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

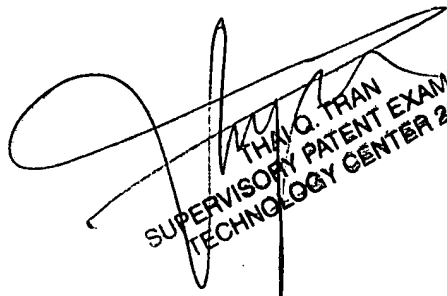
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
December 11, 2006



THAI Q. TRAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600